REMARKS:

Claims 8-14 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, claims 2-8, 10, and 14 are amended in the manner proposed by the Examiner. Applicants believe that claims 2-14, as amended, satisfy the requirements of 35 U.S.C. 112.

Claim 30 stands rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. In response, Applicants contend for the following reasons that each limitation of claim 30 is clearly described in the specification with reference to Fig. 6 in a manner that complies with 35 U.S.C. 112.

Claim 30 is to a cable including a subsystem configured to respond to a change in state of at least one conductor of the cable by asserting cable guide information. An example of such a cable is cable 82 of Fig. 6, which includes a subsystem of the type claimed. This subsystem of cable 82 includes LED 63 and LED drive circuits 85 and 87, and the following elements recited in claim 30 read on elements of the subsystem:

at least one radiation-emitting element (e.g., LED 63 of Fig. 6);

a first circuit, coupled to and capable of driving the radiation-emitting element (LED drive circuit 85 of Fig. 6, which can drive LED 63) and configured to determine from a change in state of a subset of a conductor set whether a device of a first type is coupled to the cable and to cause the radiation-emitting element to emit radiation indicating that a device of another type should be connected to the cable in response to determining that a device of the first type is coupled to the cable (circuit 85 of Fig. 6 is configured to determine from a change in the voltage between power lines labeled "VCC" and "GND" in Fig. 6 whether a video source (e.g., a source including transmitter 51) is coupled to cable 82 and to cause LED 63 to emit radiation indicating that a display device (e.g., a display device including receiver 53 of Fig. 6) should be connected to a free end of cable 82 in response to determining that a video source is coupled to cable 82); and

a second circuit, coupled to and capable of driving the radiation-emitting element (LED drive circuit 87 of Fig. 6, which can drive LED 63) and configured to determine from a change in state of a second subset of the conductor set whether a device of the second type is coupled to the cable and to cause the radiation-emitting element to emit radiation indicating

that a device of the first type should be connected to the cable in response to determining that a device of the second type is coupled to the cable (circuit 87 of Fig. 6 is configured to determine from a change in the voltage between lines labeled "HPD" and "GND" in Fig. 6 whether a display device (e.g., a display device including receiver 53) is coupled to cable 82 and to cause LED 63 to emit radiation indicating that a video source (e.g., a source including transmitter 51 of Fig. 6) should be connected to a free end of cable 82 in response to determining that a display device is coupled to cable 82).

Claims 1-15, 20-52, 55, and 58-61 stand rejected under 35 U.S.C. 103(a) as being unpatentable over "the admitted prior art," U.S. Patent 5,999,400 ("Belopolsky"), and U.S. Patent 6,809,913 ("Hochgraef").

Each of claims 1 and 31 recites a cable, including: a conductor set, a memory that stores cable data indicative of at least one characteristic of the cable, and circuitry (coupled to at least one conductor of the conductor set) configured to respond to a data request (received on at least one conductor of the conductor set) by accessing at least some of the cable data and asserting the accessed data serially to at least one conductor of the conductor set.

The only "admitted prior art" identified in support of the rejection is text on page 4 of the specification acknowledging that any cable inherently has characteristics. Applicants disagree that the application includes any admission that it is conventional to store cable data of the type recited in claim 1 or 31 (i.e., "cable data indicative of at least one characteristic" of a cable) in a memory included in the cable (as recited in claim 1 or 31).

The only teaching cited in the Office Action in support of the assertion that the prior art teaches a memory included in a cable, is Belopolsky's teaching to include resistors (Belopolsky's elements 36 and 37, each implemented as a resistor) in a cable. Applicants disagree with the assertion in the Office Action that a resistor in a cable (e.g., a resistor connected along a wire) is an analog "memory" in a cable as claimed. A memory is an element configured to store data. It cannot reasonably be contended that a resistor is an analog memory (or any other kind of memory as claimed), because a resistor connected along a conductor cannot store cable data (as claimed) or other data.

As noted, Belopolsky teaches the connection of electronic components (e.g., a resistor) along a cable. However, it cannot reasonably be contended that this teaching amounts to a teaching or suggestion to include in a cable (couple to a conductor of a cable) "circuitry" of the type recited in claim 1 or 31 (namely circuitry configured to respond to a data request received on a conductor of a cable by accessing cable data stored in a memory of the cable and asserting the accessed data serially to a conductor of the cable), especially since Belopolsky fails to teach or suggest including a memory in a cable and fails to teach or suggest accessing a memory included in a cable.

Hochgraef discloses cable 1 coupled between elements (17 and 18) of a circuit breaker (circuit breaker 10 of Fig. 3). The cable includes an EEPROM (EEPROM 7). Hochgraef teaches storing in the EEPROM characteristic values of the circuit breaker or an associated current transformer (see col. 2, lines 47-50); not "cable data indicative of at least one characteristic" of a cable (as claimed). Hochgraef fails to teach (at col. 2, lines 47-50 or elsewhere) storing "transmission characteristic related information" in EEPROM 7 (as asserted in paragraph 7 of the Office Action). Even if one assumes for the sake of argument that Hochgraef did include such teaching, the teaching does not amount to a teaching or suggestion to store in a cable "cable data indicative of at least one characteristic" of the cable as claimed. Hochgraef also fails to teach (at col. 1, lines 47-50, col. 2, lines 48-50, or elsewhere) storing "characteristic values, which effect [sic] the signal communication" in EEPROM 7 (as asserted in paragraph 7 of the Office Action). Even if one assumes for the sake of argument that Hochgraef did include such teaching, the teaching does not amount to a teaching or suggestion to store in a cable "cable data indicative of at least one characteristic" of the cable as claimed.

Neither Hochgraef nor Belopolsky (nor the admitted prior art) includes any teaching or suggestion to include a memory in a cable, or to store "cable data indicative of at least one characteristic" of the cable, or to include in a cable circuitry configured to respond to a data request by accessing cable data stored in a memory of the cable and asserting the accessed data serially to a conductor of the cable, as recited in claim 1 or 31. Thus, claims 1 and 31 (and all claims that depend directly or indirectly therefrom) are patentable over Hochgraef, Belopolsky, and the admitted prior art, considered individually or in combination.

Claim 25 recites a cable including a conductor set and a subsystem (coupled to at least one conductor of the conductor set) configured to respond to a change in state of at least one conductor of the conductor set by asserting cable guide information. The specification of the present application explains (at page 6, first full paragraph, and page 22, first paragraph), and claim 28 recites, that "cable guide information" can indicate to what type of device a free end of the cable should be connected when the other end of the cable is connected to a device of known type, or can indicate whether the cable has or has not been connected to a proper connector of a device to which it is supposed to be connected. Cable guide information is information that guides a user as to proper connection of a cable to at least one device.

Neither Hochgraef nor Belopolsky nor the admitted prior art includes any teaching or suggestion to include in a cable a subsystem configured to respond to a change in state of at least one conductor of the conductor set by asserting cable guide information as recited in claim 25. It cannot reasonably be contended that any of the "characteristics" of a cable mentioned in the last two paragraphs on page 4 and the first paragraph on page 5 of the specification is (or is equivalent to) "cable guide information." Rather, the characteristics mentioned in the last two paragraphs on page 4 and the first paragraph on page 5 of the specification are properties of a cable that determine how the cable filters signals transmitted therethrough. As noted above, Hochgraef teaches storing in an EEPROM (included in a cable) characteristic values of a circuit breaker or an associated current transformer (see Hochgraef's col. 2, lines 47-50) that can be connected to the cable; not cable guide information. Contrary to the assertion on page 10 of the Office Action with reference to claim 28, Belopolsky neither teaches nor suggests that an LED should emit radiation indicative of "cable guide information" or radiation indicative that a device is or is not coupled to the cable to which the LED is coupled. Nor would Belopolsky's LED inherently emit such radiation. Thus, claim 25 (and each claim that depend directly or indirectly therefrom) is patentable over Hochgraef, Belopolsky, and the admitted prior art, considered individually or in combination.

Claims 16-19 and 56-57 stand rejected under 35 U.S.C. 103(a) as being unpatentable over "the admitted prior art," Belopolsky, Hochgraef, and U.S. Patent App. Publication No. 2004/0230708 ("Juan"). In response, Applicants contend that claims 1 and 31 (and thus each

claim that depends directly or indirectly therefrom) are patentable over the admitted prior art, Belopolsky, Hochgraef, and Juan, considered individually or in combination.

For the reasons set forth above, claims 1 and 31 are patentable over the admitted prior art, Belopolsky, and Hochgraef, considered individually or in combination. Juan fails to teach or suggest including a memory in a cable and storing "cable data indicative of at least one characteristic" of the cable as recited in claim 1 or 31. Thus, claims 1 and 31 (and each claim that depends directly or indirectly therefrom) are patentable over Juan, Hochgraef, Belopolsky, and the admitted prior art, considered individually or in combination.

Claims 53 and 54 stand rejected under 35 U.S.C. 103(a) as being unpatentable over "the admitted prior art," Belopolsky, Hochgraef, and U.S. Patent 6,473,811 ("Onsen"). In response, Applicants contend that claim 31 (and thus each claim that depends directly or indirectly therefrom) is patentable over the admitted prior art, Belopolsky, Hochgraef, and Onsen, considered individually or in combination.

For the reasons set forth above, claim 31 is patentable over the admitted prior art, Belopolsky, and Hochgraef, considered individually or in combination. Onsen fails to teach or suggest including a memory in a cable and storing "cable data indicative of at least one characteristic" of the cable as recited in claim 31. Thus, claim 31 (and each claim that depends directly or indirectly therefrom) are patentable over Onsen, Hochgraef, Belopolsky, and the admitted prior art, considered individually or in combination.

Reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

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